

Selective Search



February / March 1993



into the Lyons den...

£2.00

Issue 044

Selective Search is a review of the UK chess computer scene published six times a year by Countrywide Computers, who stock all the leading makes and have the widest range of new and secondhand machines in the UK. Countrywide are also sole distributors for Mephisto in Great Britain and the Republic of Ireland. Orders and enquiries are welcome either by phone (0353 740323) or in writing; the address is Victoria House, 1 High Street, Wilburton, Cambs. CB6 3RB. Visitors are also welcome - hours are 9am - 5.30pm Mondays to Saturdays, although it is advisable to telephone first.

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A new look...

Welcome to the first Selective Search of 1993! All of us at Countrywide would like to thank the many readers who have called in to offer their good wishes during the recent changes here. We are looking forward to the new year with much enthusiasm; our London shop is now fully operational, and there are some great new machines on the way.

You can rest assured that the main purpose of the magazine will be just as before - to provide news, reviews and results from the chess computer scene. However we also want you to have the opportunity of using chess computers in some new ways, and to improve the service Countrywide offers still further.

With that objective in mind, we've included a readership survey along with this issue, the purpose of which is to find out how you would like the magazine to develop, and learn your views on some new ideas we are proposing. Also, some of the questions will be of particular interest to CC manufacturers, so this is one chance to influence them about the features you wish to see in future.

Special thanks are due to everyone who has sent in contributions - please keep them coming! - and especially to Steve Maughan who, whenever his job allows, will be closely associated with the new S/S.

..and a new list!

If you're one of those people who always reads the back cover first, you will have seen that the rating list sees some radical changes - we hope you will approve! Essentially, we have decided to run two lists in tandem; our own and that of the Swedish magazine 'Ply'. Ply have requested that we use their list in full, and this we have done.

The Ply list is generally acknowledged to be the most authoritative around, for two good reasons. Firstly it is purely an ongoing university project, and is therefore entirely non-commercial and free from vested interests of any kind. Secondly, the number of games played is high and all of them are at the tournament setting of 40/2 hours.

In view of all this, you may wonder why we are also producing our own list, and actually giving it sequential priority over Ply's. Basically this comes down to a matter of balance. The first thing you will notice about the Ply figures is that they are low! Nothing wrong with this in itself of course, since no-one wants inflation in the gradings, but the simple fact is that Elo grades are not always directly comparable across national borders. If a Swedish player of 2200 played a long match against a Briton of the same grade, odds are that the Swede would score over 50%. Professor Elo himself might not like

it, but there it is! Another important point is that while Ply produce ratings as an academic exercise, interesting in itself, our primary aim is to provide a practical guide on what strength of opposition a UK player can expect to meet should he buy the machine, which in turn is slightly different from someone playing the machine in a tournament, when he may be playing anti-computer chess, and go down lines in which the computer is known to do poorly.

This brings us to the thorny question of which kind of result has more validity - computer v computer, or computer v human. We don't intend to go into this too heavily in the current issue, but basically our view is that, provided a sufficiently high variety of C v C games are taken into account, these results are less prone to distortion than C v H. Having said that though, there must be a strong measure of input from v. human games to calibrate the whole thing and make it meaningful.

In a nutshell, we have made an across-the-board reduction of 3BCF points to our list from issue 43, partly due to a suspicion that despite recent cuts, there was still a measure of optimism in the figures, and also because only games played at 2mins per move minimum (and 40/2 for preference) will be accepted from now on for rating purposes. As the time allowed per side increases, the

human stands a relatively better chance, hence the BCF reduction. We have also taken the opportunity to amalgamate some models with identical or near-identical programs.

No rating list these days can hope to be totally comprehensive - there have been just too many models. Our aim therefore is to produce an honest and useful estimate of playing strength - not some kind of absolute, ultimate truth!

The PC rating list raises more questions. Most readers will be interested only in the top-end programs, (not the case with dedicateds, I hasten to add) and if their strength were measured by games on the same PC, this would indeed provide a reliable guide.

There is no neat ratio by which a grade achieved on a 486 diminishes on 386s, then 286s, etc. since some progs are more hardware-dependent than others. Countrywide has a 486/33, so we intend to standardize on this, and build up a new list on which results will be directly comparable. However Ply's PC gradings will of course be shown as they are.

If there is a general hue and cry to reinstate and develop the PC list as was, we will think again. In the meantime though, we think this is the way to go...

New from Mephisto...

Mephisto have reacted vigorously to the devaluation of the pound vis-a-vis the Deutschmark, and have announced some dramatic price reductions on key models at the upper end of their range.

We had naturally expected prices to go up, so this really is good news for anyone who has been saving their pennies for Vancouvers, Risc 1Mbs, Berlins and the like - both of the first two are now available, in the Exclusive board, with a fiveer change from a thousand pound note, a reduction of no less than £200. The Berlin has had £50 lopped off its price, and now competes head-on with the Saitek Risc 2500 at £399.

Regular buyers of chess computers learn to develop a philosophical approach to price changes, whether going up (before you buy) or down (afterwards!), the rule seems to be to buy what you want, when you want it, without worrying too much about the fluctuations in the market. The progress in the field is such that if one waits long enough, there will always be something better, so the strictly logical course would be to wait forever!

Chess computers do at least have the compensating advantage of holding a fair proportion of their value when it comes to trading up, so in a sense, one actually spends a good deal less than one pays! (That's our story at least - and we're sticking to it!).

We only have the barest details on the new Mephistos at the moment, but we do know that two new portables will be joining the range, called the Atlantic and the Avanti, and priced around £30 and £40 respectively. Also new is the Montreal, which will boast a wooden A/S board and a BCF200+ program.

If this goes on sale around the £450 mark as hoped, Mephisto may well be onto a winner with those people who prefer a touch of luxury rather than extracting the last possible BCF point for their money. As computers get stronger - strength that will be superfluous to the needs of many - this trend may well develop rapidly, and the most successful computers will be those which offer the best features, analysis, and training functions for the money.

However there will always be some enthusiasts (and very strong players) for whom out-and-out playing ability will always outweigh all other considerations. The new Mephisto models should be on sale March/April.

Tascforce Approaching...

We received an interesting press release from TASC, who make the risc processor for Saitek and Mephisto, and who also produce the ChessMachine under their own name.

Not suprisingly, they are more than a little chuffed about CM's victory at the 1992 Computer World Championships, and have produced a limited edition special for PC's called the ChessMachine Madrid.

This beast has the same 30 MHz (!!) Risc processor and special tournament program as was used in Spain, prompting TASC to make the rather contentious claim that "this is the first time in history that the Computer Chess World Champion has been available as a commercial product" - a sentiment unlikely to be endorsed by Mephisto!

Only 150 of these commemorative issues will be made, so to quote TASC again, "order now or be disappointed..." Certainly the general consensus seems to be that despite the inadequacies of the 5-round Swiss format employed in Spain, the ChessMachine thoroughly deserved its victory, and in its 'Madrid' format at least, really can be regarded unequivocally as the strongest program around.

Even more intriguing is the news that TASC are now venturing into the conventional dedicated market and have produced a machine with a board!

However 'conventional' may not be quite the right word to use about a computer where the operating board and module are separate, which has an extra-large LED window with analogue clocks, and an ultra-thin wooden board with piece recognition.

Thankfully TASC have steered clear of any puns in the naming of this incredible - sounding machine (Tascmaster, Tascforce etc.) and have simply called it the R30. This ded also has the same hardware used in Madrid, and can therefore make a very good claim to be the best chess computer money can buy, bar none.

If you need to ask just how much money, it may well be that you can't afford it, although it is a very long way from being the most expensive CC there's ever been. At any rate final selling price should be known by the time you read this, and should at least be on the right side of £2,000. So, especially if you already have a top-class machine to trade in, you just might be able to own one after all... Please don't all ring at once though - we only have three phone lines!

That the new ChessMachines are capable of truly fabulous play there is no doubt. If you only play through one game in this issue, make it the CM/Azmaiparashvilli game below - I think you'll see why! The game where it flattens an IM isn't bad either...

Perhaps the CM likes the sun, because these games were also played in Spain, this time in Oviedo, where it competed in a 500 strong field of whom well over a hundred hold international titles. The format was an 11-round Swiss with a time limit of 45 minutes each to complete the game.

The ChessMachine came 45th with 7.5 points, equalling the likes of Shirov and Kramnik, and ahead of Khalifman, Flear, and Murray Chandler.

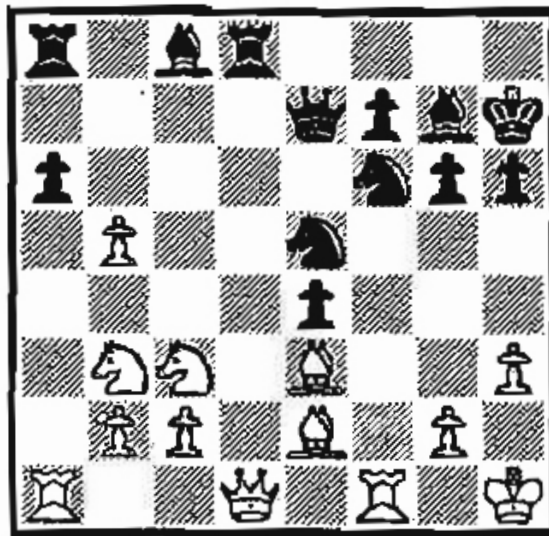
This result can hardly be attributed to getting an easy ride, since of the 11 opponents 5 were GMs, plus an IM and an FM for good measure. Average grade of the opposition was 2392, so the CM's event rating was 2525, genuinely a Grandmaster performance. Nor was this achieved through rabbit-bashing (rabbits at Oviedo could be defined as those without a title!) since the CM scored 4/7 against players with gongs, including wins over GM Glenn Flear and IM Silvio Danailov. In point of fact, the computer's rating against the 7 title-holders was 2563, or 245BCF!

W: ChessMachine (Schroeder 30Mhz)

B: Azmaiparashvilli (GM 2620)

Pirc

1. e4 d6 2. d4 g6 3. Nc3 Bg7 4. f4 Nc6 5. Be3 Nf6 6. Nf3 0-0 7. Bc2 Ng4 8. Bg1 e5 9. fxe5 dxe5 10. d5 Nb8 11. h3 Nf6 12. Be3 c6 13. 0-0 cxd5 14. exd5 Nbd7 15. d6 a6 16. Ng5 h6 17. Nf3 Kh7 18. Kh2 b5 19. a4 e4 20. Nd4 Ne5 21. axb5 Qxd6 22. Kh1 Rd8 23. Nb3 Qe7



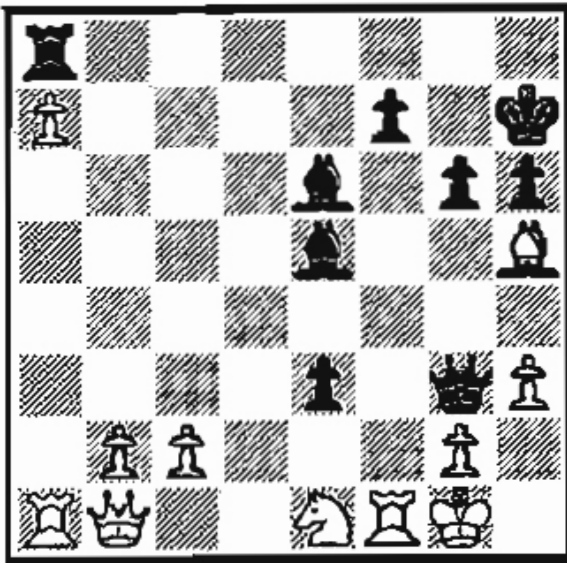
24. Qb1. In preference to the more obvious Qc1 with Qh4 to follow, CM prefers its chances on the queenside and bolsters its b and c pawns. Bc6 25. bxa6 Nc4 26. Bc5

All CM's pieces are nicely co-ordinated and he has a clear advantage.

...Qc7 27. a7 c3 28. Bd4! Nd2 This loses the exchange, but the GM may have decided that this route offered more counterplay than Nd5, bishops off, Nb5, Qc8.

29. Nxd2 Rxd4 30. Nb5 Qb6 31. Nxd4 Qxd4 32. Nf3 Qf4 33. Kg1 Nh5 34. Ne1

CM has now established a solid defensive position and prepares to withstand the onslaught of a seriously riled GM, who now proceeds to fight back brilliantly. ...Qg3 35. Bxh5 Bc5



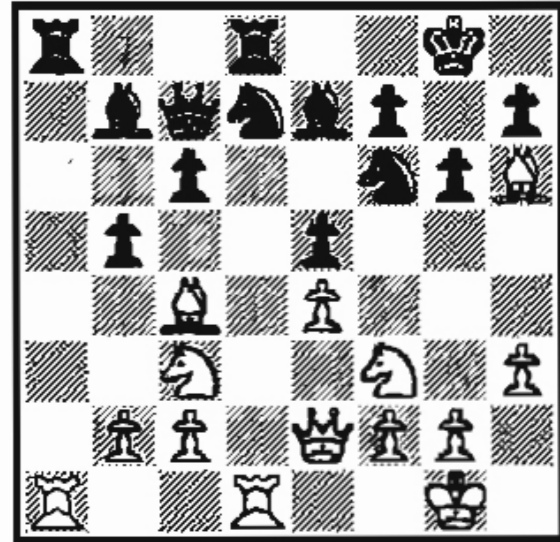
36. Rf3 Qh2+ 37. Kf1 Bc4+ 38. Nd3 Bd4 39. Qe1 Qh1+ 40. Ke2 Qxg2+

41. Kd1 Bxd3 42. cxd3 Qxb2 43. Ra5 Rc8 44. Rxf7+ Kh8 45. Rc7 Rxc7

46. a8Q+ Kg7 47. Rc5 Bxc5 48. Qe4 e2+ 49. Q1xe2 Qa1+ 50. Kd2 Qa5+.. and black got the draw by repetition.

W: ChessMachine (Schroeder 30Mhz)
B: Danailov (IM 2455)
Philidor

1. d4 d6 2. e4 Nf6 3. Nc3 e5 4. Nf3 Nbd7 5. Bc4 Be7 6. 0-0 0-0 7. Qe2 c6 8. a4 Qc7 9. h3 b6 10. Rd1 a6 11. Be3 Bb7 12. dxe5 dxe5 13. Nh4 g6?! To pre-empt Nf5, black creates the hole that contributes to his downfall. 14. Bh6 Rfd8 15. Nf3 b5 16. axb5 axb5. The CM has an edge, but things don't look too bad for black until...



17. Ng5!! The start of a fine and unstoppable combination. ...bxc4 18. Qxc4 Rf8 19. Rxa8 Bxa8 20. Bxf8 Nxf8 21. Nb5! Qb7 22. Qxf7+ Kh8 23. Nd6! (Rd8 ..Bd8, Qf8+ ..Ng8, Nf7+ ..Qxf7, Qxf7 ..Pxb5, Qc8 also wins but more slowly, with Q vs 3 paralysed pieces)

...Qd7 24. Qa2 Bxd6 25. Rxd6 Qe7 26. Qxa8 h6 27. Re6 Qg7 28. Nf3 Kh7 29. Rxc6 ..Resigns 1-0

Head-to-Head

The Kasparov 2500 and the Berlin dominate the mid-price sector - but which is the better buy?

The re-emergence of Saitek as a serious force in the chess computer field has to be good news for everyone - even those who would never buy anything other than a Mephisto - since nothing quite concentrates the mind of a manufacturer than a bit of stiff competition!

In the last year, Saitek have signed up some of the best programmers in the business, and the first fruit of these labours is the Kasparov Risc 2500, which finally made it into the country (in regrettably small numbers) early in December.

The 2500 was certainly the most talked-about arrival of 1992 but how does the reality match up, and how does it compare to Mephisto's contender in this bracket, Richard Lang's Berlin?

Demand for the 2500 was such that we had to sell even our test model much sooner than we would have liked, but at least it wasn't before we completed a ten-game match between the two at the tournament setting of 40 moves in two hours. We intend to make this a standard format when pitching two dedicated machines against each other; ten

tournament games should be enough to even out all but the most outrageous bad luck, and give a pretty reliable guide as to which computer is the stronger.

The result was a 6.5/3.5 victory to the Risc, which scored 5 wins, 3 draws and 2 losses. If Berlin's grading is taken as 203 (a safe, even conservative estimate) the 2500's match result equates to 218, which may or may not prove to be a bit over-optimistic, but is a very impressive result nonetheless. It is certainly true that anyone looking for a computer in the £400 bracket now has the choice of two quite superb machines, and the decision as to which to go for will rest upon the very different features and characteristics that each computer has.

Taking the 2500 first, it has a great deal more to offer than pure strength. Amongst the very attractive features on offer are no less than five selectable playing styles; 'active', 'solid', 'offensive' 'defensive' and 'normal'. I didn't have much opportunity to experiment with these settings, other than five half-hour games against the Diablo, one on each style and from the same opening position. The 2500 lost on 'defensive' but won the others, with 'active' producing the quickest victory. More importantly, each style setting really did seem to live up to its name!

The main match was played using the default settings of both machines. As luck would have it, none of the ten games was really outstanding, even if they all had their moments. However both computers are certainly capable of sparkling chess, as I discovered not only by playing them myself, but also in quickies against the Diablo!

I am not alone in suspecting that its default 'normal' setting is not in fact its strongest. Mr Curtis of Brentford reckons 'offensive' is the best, whilst my money would be on 'active'. However both his opinion and mine are based on too few games - if anyone wants to research this more thoroughly, please let us know what you find.

The 2500's manual claims that it has a go-getting, human-like style "very different from the safety-first approach of most computers". Lots of computers are claimed to play like a real person, as it is an attractive thing to say from a marketing point of view. However the 2500 does justify such a comment more than most. It can indeed be far more enterprising and gung-ho than the average machine, but equally it will sometimes lapse into rather planless and ineffectual play in quiet positions (relative to the average 215 human player, that is!).

The Berlin, by contrast, really impressed me by the way it almost always seemed to have a purpose, playing according to a discernible

plan. Against me, and against other machines, I would describe the style as fluent and positive, and only something as sharp as the 2500 can occasionally make it look a little flat-footed. In a nutshell, I felt that the Berlin may have the deeper chess knowledge, and is happier in a wider range of positions than the Risc - a more universal style, if you like. The 2500 can appear somewhat brittle at times, but in the kind of position it likes, it is nigh on unstoppable. Both are quite prepared to sacrifice on spec, but the Risc is the more willing to do so, and really is capable of playing dynamic and exciting chess.

Certainly the speed of the Risc is phenomenal, and those who doubt it need only refer to Graham White's article in this issue. There were a couple of times in the match when the Berlin worked its way to a superior position, only to be felled by neat tactical resources from the Risc. More typically though, the Risc would gain an edge in the early middle game, win a good pawn, and then turn the screw until the Berlin went down. Given equal hardware, the match result might well have been reversed, but as the hardware certainly isn't equal, one has to take the result as it stands.

The Risc also scores heavily in other ways. Its operating system is superb - quite simply the best I've ever come across - and this combined with the large, clear display and exceptionally light touch

press-sensory board, makes the machine a real pleasure to use.

The Saitek also names the opening and variation being played - a great feature in my view, and one which I hope other manufacturers will pick up on.

My only adverse comment would be about the styling; it looks a bit tinny, and the sundry go-faster stripes look a bit naff to me, but may appeal to the boy racers amongst you! That said, people don't buy chess computers to stick on the mantelpiece...

The Berlin is altogether classier in appearance - truly a BMW of press-sensories - and in its favour also are Mephisto's '2 Play' system of ongoing analytical comment, and storage for up to 50 games.

The 'Handicap' playing level option is also a very good idea. You can set it to take the same amount of time as you ('100%') or only 40% as long, or whatever.

Both computers can now claim to have shown their mettle in the real world of tournament play. At the Bury Congress last November the Berlin came 1st equal with IM John Emms (230BCF) and two other very strong players for a tournament result of 209!

The Saitek took part in the prestigious Kings Head Quickplay tournament held on January 23rd. It was entered by us on behalf of the BCM Chess Shop located nearby in Kensington. Its result, based on four of the six games played, was a highly respectable 200BCF (or 199.5 to be exact!).

In the other two games, which it won, the Risc faced strong but ungraded players from the former Soviet Union. When these two players' tournament grades are known, the 2500's can be calculated more precisely, but we expect it to be in the region of 205.

So returning to the original question as to which is the better buy, the answer is not as clear-cut as some might think. The 2500 is objectively stronger, but there are those who simply like the way Lang programs play chess. There is a faction which prefers the Vancouver to the Mephisto Risc 1Mb for the same reason.

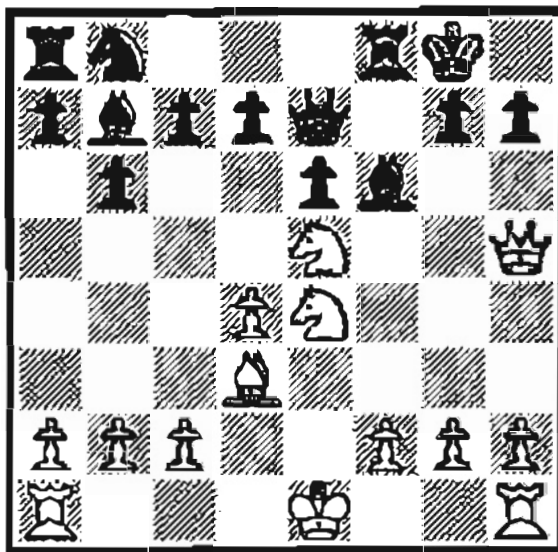
If it were my money, the balance of features would just tip my decision in favour of the 2500, but there will be plenty of people who decide for the Berlin. Either way though, we would not expect anyone to be disappointed. Of course one could always consider buying both, but no-one would do that, would they?

SK

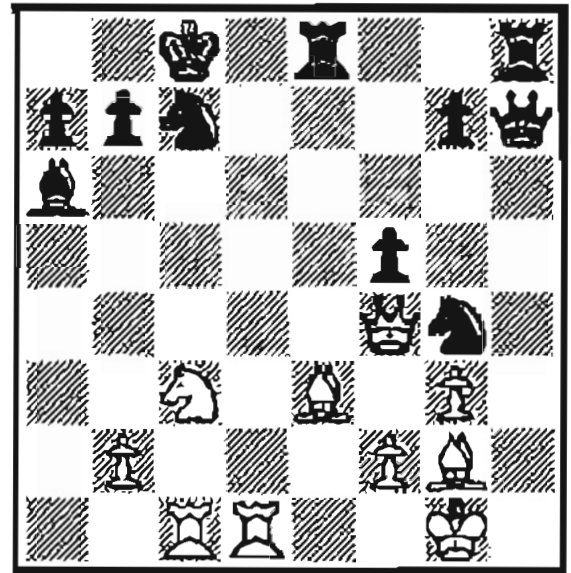
Mate!

Graham White on computer tactics

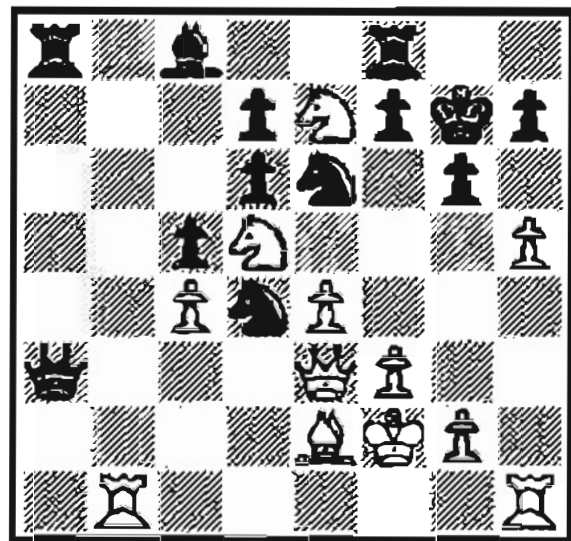
The best programs have instructions to search deepest when one side has a sequence of checks. This enables them to find some forced mates very quickly indeed. The first program I tested that could do this was the Fidelity Mach 3, and the idea was also used in the Mephisto Lyon & Vancouver. The new Kasparov Rise certainly does it as well. Let's take a look at some very interesting positions...



White can force mate by 1. Qh7+!! Kh7 2. Nf6+ Kh6 3. Neg4+ Kg5 4. h4+ Kf4 5. g3+ Kf3 6. 0-0 followed by Ne5 or Nh2. There's also the more prosaic 6. Be2+ Kg2 7. Rh2+ Kg1 8. 0-0-0 mate! Here are the solving times; Mach 3: Nothing in 15 mins. Vancouver 020: 2m.10s. Kasparov Rise: 1 second!



White mates in 11 by 1. Qc7+ Kc7 2. Nb5+ Kb8 3. Rd8+ Rd8 4. Bf4+ Ne5 5. Be5+ Ka8 6. Nc7+ Kb8 7. Na6+ Ka8 8. Nc7+ Kb8 9. Nd5+ Ka8 10. Nb6+ ab 11. Ra1 Mate! Solving times; Mach 3: None in 20m. Vancouver 020: None in 20m. Kasparov Rise: 65secs!



White mates by 1. Qh6 Kh6 2. hxg+ Kg5 3. Rh5+ Kh5 4. f4+ Ne2 5. Nf6+ Kh6 6. Rh1+ Kg7 7. Ne8+ Re8 8. Rh7 and 9. Rf7 mate! A breathtaking mating combination. Times: Mach 3: 4m29s. Vanc.020: none in 30m. Rise 2500: 5m.30secs.

A Higher Intelligence at Madrid...

We asked Mark Uniacke, the programmer of the HIARCS (Higher Intelligence Auto Response Chess System!) PC program, to annotate his favourite game from the Madrid World Championships, and he chose this neat win over one of the better non-commercial entrants in the field.

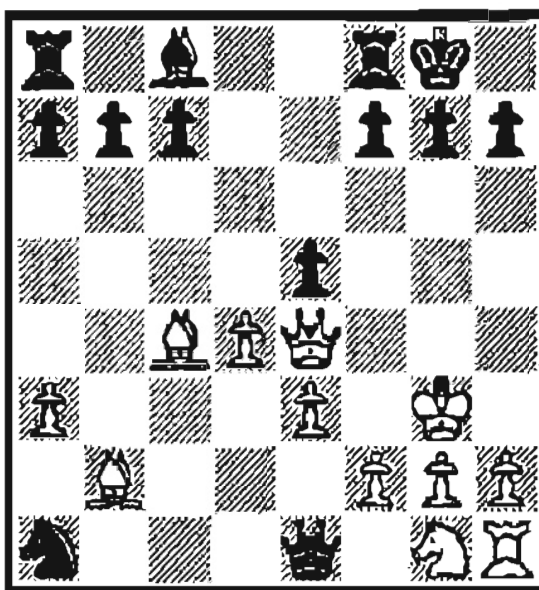
Pandix (486/66)

HIARCS (Sparc-2/40Mhz)

1. d4 Nf6 2. c4 e6
 3. Nc3 Bb4 4. Qc2 d5
 5. a3 Bxc3 6. Qxc3 Ne4
 7. Qc2 Nc6 ..c5 is suggested by BCO2 and is more common, however the text leads to a very sharp position in which computers excel)

8. e3 e5 9. cxd5 Qxd5
 10. Bc4 Qa5+ 11. b4 Nxb4
 12. Qxe4 Nc2+ This was the last move in Hiarc's opening book for this line.

13. Ke2 Qe1+ (eval. +154)
 14. Kf3 Nxa1 15. Bb2 O-O
 16. Kg3 Although Hiarc was out of book it was still playing book moves, including predicting all white's moves. I was pleased to see it anticipate Kg3, as this shows it has a good understanding of the King safety requirements of the position for white.



6... Re8!? 'book' is Bd7 which apparently leads to equality after Nf3. However Hiarc's move looks like a possible improvement for black.

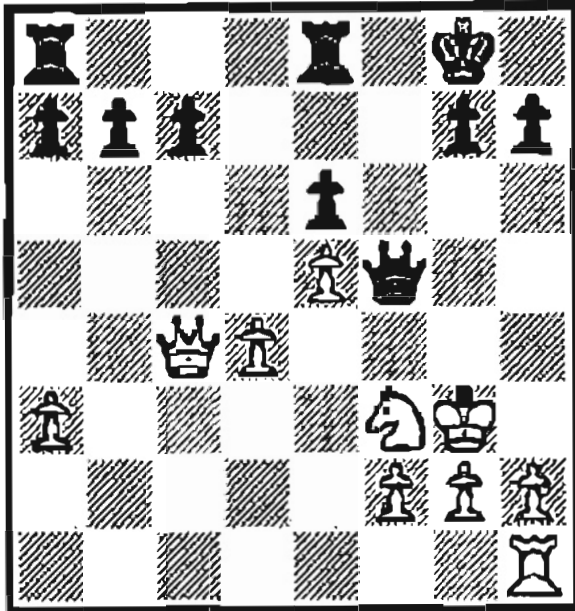
17. dxe5?! Pandix, now out of book, allows black the chance to blockade the centre and blunt white's QB. Hiarc later analysed the position for white and came up with the superior continuation of Nf3! Qxh1 18. Ng5 with chances for both sides.

17...Be6! (+145) Hiarc thought for over 12 minutes to ensure that this was his best continuation at this key point. It was pleasing to see Hiarc's time control algorithm understand the importance - and difficulty - of this position.

18. Bxe6?! Hiarc was expecting Bd3 which is white's best chance. Now black can blockade the centre permanently and has a winning advantage. 18 ...fe! Although Rxe6 looks more natural, this move is

equally good as it locks up the centre and gives black the f-file down which to attack.

19. Qc4 Qb1 20. Bd4 Qg6+
 21. Kh3 Nc2 22. Nf3 Qf5+
 23. Kg3 Nxd4 24. exd4



Hiarcs has now extricated its Knight from difficulty and exchanged it for white's active Bishop. White should have recaptured with his queen as predicted by Hiarcs, in order to come to the white King's defence. Hiarcs now despatches white in clinical fashion!

24...Qg6+ 25. Kh3 Rf8
 26. Nh4 d5 was expected and is clearly better ...Qh6

27. f4 White sees that things are getting much worse and tries to delay the end. Mephisto Risc 1Mb also selects f4 as best for white.

...Rxf4 (+663)

28. g3 Rxf4 (ruthless!)
 29. gxf4 Qe3+ 30. Kg2 Qe4+

31. Kg3. The point of this combination - seen on move 27 - is that white cannot play Kg1 as Rf8 forces mate. ...Qxb1

32. Qxe6+ Kh8 33. Qb3 Qg1
 34. Kh3 Rf8 35. Qd3 Rf4

With this move Hiarcs announces mate in 7: 36. Qe2 g5 37. hxg5 Qxg5 38. Qh5 Qxh5+ 39. Kg2 Qf3+ 40. Kg1 Rg4 ++

Mark makes the point that Hiarcs was using the old Sparc processor, about equivalent to a 486 at 50Mhz, NOT to be confused with the Texas Instruments / Sun Microsystems SuperSparc chip as used by the Kasparov Sparc machine at Madrid. This chip is around 3 or 4 times faster than the Sparc Hiarcs was using, and any commercial Kasparov Sparc is bound to use a much cheaper processor at perhaps 20-25Mhz.

International Master Peter Wells was given a copy of Hiarcs to test prior to release, and was highly impressed - sufficiently so that all Hiarcs packs now carry an endorsement from him. He especially singled out its positional and endgame abilities. At £69.99, Hiarcs Master version is nearly £20 cheaper than Chess Genius, and the price differential accurately reflects the difference in strength. For those who want a strong, specialist program without a high price tag, the Standard version of Hiarcs is probably the best value on the market at only £35.99.

Can a computer make you World Champion?

Mike Healey of Countrywide intends to find out...

Question: What does a normal, healthy, pretty, seven year old girl ask her Mum and Dad to buy her for Christmas. Dolls? A party dress? Or in these days of equality, maybe a mini toolkit? A train set? No chance.

Answer: A chess computer, or the latest volumes of Chess Informant on disc...

"This girl is normal?" I hear you ask. Yes, she is, apart from one thing - she can play chess rather well! As to how well, I'll try and convey shortly, but first of all, who is the young lady?

She has the lovely Irish name Siobhan, pronounced like "Shevaun", but for short she is usually called "Sioby" - pronounced like "Shuvvy" or even "Shuv". We like "Shuvvy" the best - the name grows on you after a while. Her proud Mum and Dad are Elaine and Sean (as in Connery) O'Neill. That's the phonetics bit out of the way!

Shuvvy learnt to play chess at the age of five, although 'learnt' may not be quite the appropriate word. She was watching Dad playing on an old Fidelity Sensory 8 - for younger readers this is the sort of computer you would expect to turn up on the Antiques Road Show! Mr O'Neill is a strong club player himself, so the dear old S8 was getting its usual pasting, but Shuvvy became interested and seemed to understand the way the pieces moved. Before long, she was agitating to play in a chess congress, having heard that her Dad went to such mysterious events. With some reservations, he entered her for one, and needless to say, she was annihilated. Undeterred by this brutality, she still wanted more, and 7 days later she was entered for the Essex Under Eight's Championships. This is a mixed tournament of course - for boys and girls. Result: Shuvvy O'Neill wins outright on 5.5/6.

Even therefore to describe her rise as meteoric is perhaps being over-flattering to meteors! She already has a string of prestigious titles to her credit - invariably in much higher age groups.

Although her rate of climb makes Messrs Kasparov, Karpov and the like (at similar age) seem like absolute plodders, Mum and Dad have their feet planted firmly on the ground. They know full well that she might suddenly level off, or lose interest, or (more likely) carry on improving but at a much slower pace. They are happy that she has other interests, (e.g. loves watching the Turtles on television) but above all they simply want her to enjoy chess, as indeed she does to a very high degree. So if truly great things are destined for her, that would be the icing on the cake, but no-one can foretell how the future will unfold.

Where do Countrywide come into this? Partly, it is because the O'Neills live not far down the road. There is nothing like hoping for a bit of reflected glory! But it does go deeper. We very much like the whole family; Shuvvy herself is delightful, and if we are able to help by supplying the most relevant dedicateds or computer software, it seems the least we can do for a youngster who appears to have the most extraordinary talent.

Currently they have a Mephisto Lyon 32, the model which Jim Plaskett said was a Grandmaster at quickplay. Incredibly Shuvvy has already taken some games off it, but here we give the very first game she played, which although a loss and not a particularly scintillating example, does at least show the fighting spirit and sheer hatred of losing that all champions need to have. Time settings are not known.

W: Lyon 32 (aged 2)

B: Siobhan O'Neill (aged 7)

Alekhine

1. e4 Nf6 2. e5 Nd5 3. d4 d6 4. c4 Nb6 5. exd6 cxd6 6. Nc3 g6 7. Bd3 Bg7 8. Nge2 0-0 9. 0-0 Nc6 10. Bc3 Nb4 11. Re1? This loses a good pawn by force. Either Ng3 keeping black's QB from F5, or simply b3, would have kept things pretty level. Siobhan fights hard from here on in, but the extra pawn tells in the end. Nxd3 12. Qxd3 Bf5 13. Qd1 Nxc4 14. b3 Nxe3 15. fxe3 Re8 16. Qd2 d5 17. Rac1 Qd7 18. Nf4 c6 19. Na4 Qd6 20. Nc5 b6 21. Ncd3 Be4 22. Rxc8 Rxc8 23. Rcl Rxc1+ 24. Nxc1 Qc7 25. Ncd3 g5 26. Ne2 e5 27. dxc5 28. Nxe5 Qxe5 29. Qd4 Qxd4 30. Nxd4 Kg7 31. Kf2 Kf6 32. g4 a5 33. a3 h6 34. b4 axb4 35. axb4 Ke5 36. Nc6+ Kd6 37. Nd4 f5 38. Kg3 Kc5 39. Nc6+ Ke6 40. h3 b4 ..and Shuvvy resigned on move 52.

In future issues we will be keeping you posted on Shuvvy's progress, with particular reference to her battles against the computer - with her own and her Dad's comments as to how much it's helping. If her next result is 0/6 in the Chipping Sodbury Minor (Under 3's Section), please watch out for our future adverts for train sets, toolkits and dolls.

Mismatch!

You have spent the last ten years resting quietly in a darkened room. With no warning whatever, you are turfed out, plugged into the mains, and made to play a PC prog from Hell...

This dismal fate befell a Voice Chess Challenger, now in the twilight of its years, but in its day (1979ish), an object of desire capable of beating perfectly respectable club players. At least, it stood a chance provided they couldn't swim to the safe haven of an endgame, where the vole-like lookahead of all computers could be relied upon both for a full point from almost any position, and a good chuckle in the process. Facing the Fidelity across the table was he of the bulging forehead, Richard Lang's Chess Genius. In the first game, and until the VCC got used to the light, we thought it only fair to give it odds. So we gave it white. Let's just say it wasn't *quite* enough, so...

Game 2 (remove white's Queen)

W: Chess Genius (486/33) 10s/M av

B: Voice Chess Challenger 15s/M av

1. Nc3! Mike Healey, who was turning the PC's handle, was mightily relieved to see this move (there was money on the outcome) - he was worried CG might resign at this stage - Eval -9.96! ...Nc6
2. e3. Nf6. 3. Bh5 Nb4. the VCC's tactical phase. If now, er, h3, Nxc2+ could offer Black slight drawing chances...

4. Ba4 (drat!) ..c6 5. Nf3 d5. 6. a3 Na6
7. d4 Bf5 8. h3 b5. 9. Bh3 (Being on random, CG charitably spares VCC from the headaches after his preference of Nxb5,Bxc2) 9. ...Qd6. 10. Nh4 CG was sufficiently cocky to pick this 10th choice on his move list - perfectly adequate against a VCC after all..

...Be4 11. 0-0 Nc7 12. f3 Qg3 13. fxe4 Qxh4 14. Rf4 Qg3 15. e5 Nh5 16. Rf3 Qg6 17. g4 f5 Black's Knight is not long for this world, and CG's eval is now a mere -7.90.

18. Rxf5 b4 19. Ne2 c6 20. Rxh5 bxa
21. bxa Be7 22. Ba4 Kd7 23. c4 R(h)b8
24. Nf4 Qc4 25. cxd exd 26. Kh2 Rd8
27. e6+! good enough to bring the deficit down to -4.30 with Kd6, but CG didn't even dare to hope for.. ..Nxe6??
28. Rc5 Nxf4 29. Rxe4 dxc4 30. exf4 Kc7. Now only +1.75 up against the man from mensa, the VCC switches to its headless chicken algorithm and makes a run for it... 31. Be3 Bf6 32. Rc1 Rd6
33. d5! Bb2 34. Rc4 Re8 35. Bxc6 Re7
36. Be5 Rxc6 37. dxc6 Re6 38. Bxa7 Bxa3
39. Bh6! (just CG showing off again..) ..Kxb6 40. c7 (VCC's policy of sacking most of his pieces, the centre and both wings, is starting to look suspect) ..Rc6 41. Rxc6+.. CG has reversed the eval with which he started, and it is time to draw a veil..

Although less than nothing compared to its amazing 237BCF at Kings Head (of which more next issue) this is nonetheless a brilliant performance from Genius. The VCC may be a bit of a wally by today's standards, but hardly one player in a hundred could give it Queen odds and live! SK

How Good is Your Chess Computer?

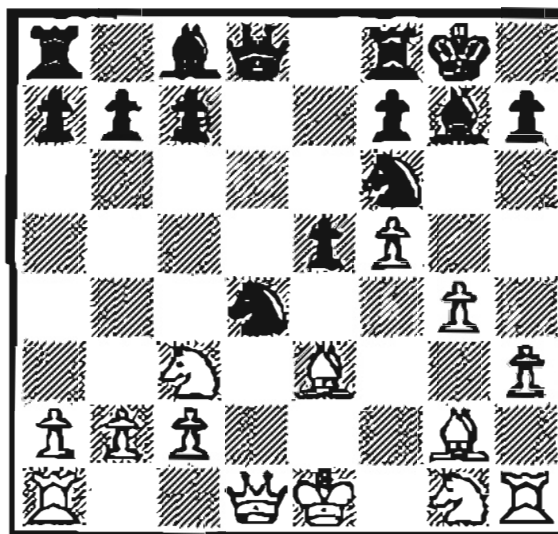
In the first of what we intend to make a regular feature, Steve Maughan puts four machines through their paces

One popular article in the magazine 'Chess' is the "How Good Is Your Chess?" feature which appears every few months. We have adapted one of the old articles to see how well a range of chess computers copes with the game. This is taken from the September 1981 edition of Chess and is based on a match from round five of the Lloyds Bank Masters in London 1981. If you have not come across the format before, the idea is to guess the move played by one side (in this case Black) with points being awarded according to the strength of the move you suggest. To get the most out of the exercise, you could try playing through the game yourself before you test your own machine (sliding a card down the page to avoid seeing the moves), and then compare the scores and the choices made.

We have tested four machines, covering a wide range of playing strengths. Hopefully the variety of strengths and styles will highlight the progress made in the last ten years. The machines were given three minutes to analyse each move. The first machine we tested was the Novag Constellation 3.6 MHz; a popular computer launched in 1983 as a 'state of the art' machine with a grade of around 140BCF. The other three machines are all currently available. The portable Travel Master has a grade of 169BCF, the Milano 178BCF, and the Vancouver 68020 205BCF. So you are Black, and sitting beside English Grandmaster Raymond Keene. Your opponent is Jon Arnason from Iceland.

Modern Defence **White: Arnason** **Black: Keene**

1.e4 g6 2.d4 Bg7 3. Nc3 d6 4. f4 Nc6 5. Be3 Nf6 6. h3 0-0
7. g4 e5 8. dxe5 dxe5 9. f5 gxf5 10. exf5 Nd4 11. Bg2



White has followed a variation pioneered by Bobby Fischer in his game against Udovcic in 1970. From now on try to guess Black's moves.

- Research Novag* 11.... **Qe7** 3 points. None of the computers favoured this, or any other move given credit (c6 2 points, Ne8 1 point and c5 1 point). Novag played Qd6, Milano and Vancouver Re8, Travel Master h5. None of these moves are particularly bad, although h5 would seem to encourage white to storm the king side. *Research Novag, Re8*
12. **Qd2**
- 2* ... **Rd8** 2 points. A natural follow-up move found by all except the Vancouver which preferred Qb4 (no points). c5 gains 1 point. *2*
13. **Qf2**
- 0 3* ... **h6** 2 points. The Milano and Vancouver both found this move which is preparing for white playing g5 at some stage. The Novag played Qb4 which can be adequately met by O-O-O, while the Travel Master played the weak a6, which seems to be a "I've nothing better to do" type of move. The Travel Master has a rather limited positional knowledge and depends upon its fast tactical search to achieve most of its victories. *2*
14. **O-O-O**
- 1* ... **c5** 1 point. Found by all except the Novag which changed its mind from c5 to Qb4!? (no points) which gives a clear advantage to white after 15. Nf3 Ne8 16. g5.
15. **Nge2**
- 2* ... **a5** 3 points. We have come to a critical stage in the game. Black must formulate a plan and it is not difficult for a human to see that with the kings having castles on opposite sides it is correct to start pushing pawns towards the opponents king. This medium to long range vision is one of the more difficult aspects of programming computers to play chess, and it is in this area that computers have improved considerably in recent years. With this in mind it is not surprising that the Milano and Vancouver were the only ones to find 15...a5, while the Travel Master chose Rb8 (2 points) and the Novag chose Qc7. *3*
16. **Ng3**
- 2* ... **a4** 2 points. The logical follow-up to the previous move. This time the Travel Master and the Vancouver both played the correct reply, while the Novag was still adamant that the Queen should move to c7 (no points) and the Milano chose the very strange Rd7?! (no points) which seems to lack purpose. 1 point for Ra6. *1*
17. **g5**
- 1* ... **hxg5** 1 point. The only move; found by all the machines. *1*
18. **Bxg5**
- 1* ... **a3** 1 point. Again the only consistent move and surprisingly favoured by all the machines.

19. Nd5

... **axb2+** 1 point. The Vancouver played Rxd5 which is better than axb2+ and is worth 3 points. It gives 19...Rxd5 20. Bxd5 axb2+ 21. Kb1 Qd7 22. Bb3 Qc6 23. Kxb2 with an evaluation of -0.54. The other machines chose the passive Qd6 (no points) and rejected axb2+ since they considered that white stood better after 20. Kxb2, missing 20...Rxd5! 21. Bxd5 c4! 22. Bxc4 Qc5 winning

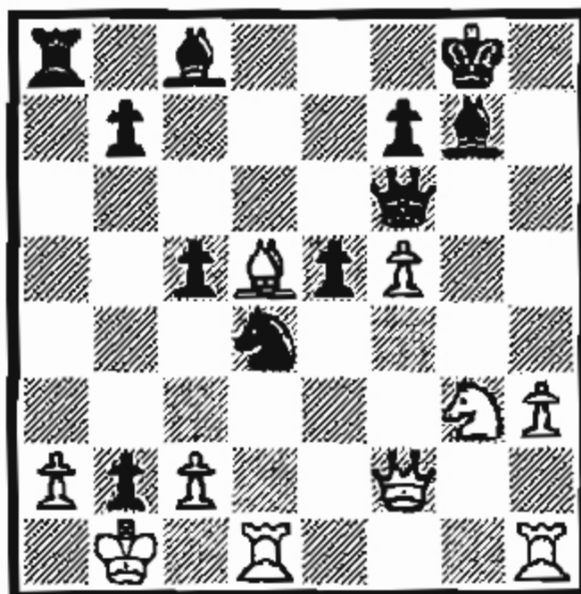
20. Kb1

... **Rxd5** 3 points. With the queen and knight under threat there are only two possible moves Rxd5 and Qd6 (1 point). Qd6 does give black a draw via 20...Qd6 21. Nxf6 Bxf6 22. Ne4 Qa6! 23. Nxf6+ Kg7 24. Bh6+! Kh8 25. Bg7+ Kxg7 26. Qg3+ Kxf6 27. Qh4+ gives perpetual check. This is a little too deep for all of the machines. As a result all the computers opted for Rxd5.

21. Bxf6

... **Qxf6** 2 points. An easy move for the all computers to choose as it moves the queen to a more active square.

22. Bxd5



... **Qa6** 1 point, the only scoring move. After a flurry of tactical activity it is once again time to choose a plan. The logic behind Qa6 seem quite clear, black is lining his queen and rook up on the a file in order to create tactical threats against the white king. However, only the Vancouver chose this move. The Novag went for Be6, but after 23. Bxc6 fxe6 24. Rhg1! white is winning. Travel Master plays Qd8 which is uncharacteristically passive, while the Milano wanted to play Qh4.

23. c3
... c4 2 points. A forceful move chosen by all the computers. The only other move to gain credit is Nb5 1 point.

24. Qxb2
... Nxf5 1 point. This is chosen by the Milano, Travel Master and Vancouver and is the only move to gain credit, the Novag chose Nb5 which is interesting, but not quite as strong as Nxf5 since it does not bring the black bishop on c8 into the game.

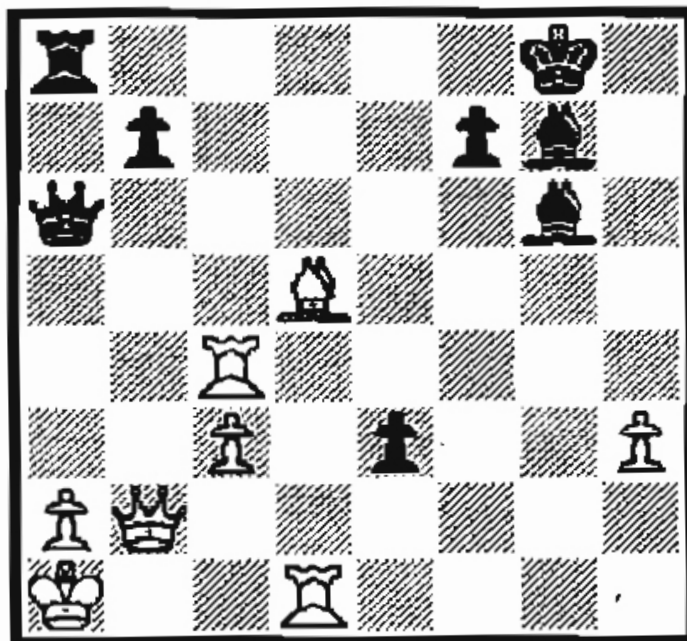
25. Nxf5
... Bxf5 + 1 point. The only move and therefore chosen by all the machines.

26. Ka1
... e4 2 points. The Vancouver and Travel Master find this critical pawn move which threatens Bxc3 winning at once. The Milano and Novag both play Ra7? (no points) a move only a computer would even consider playing.

27. Rhg1
... Bg6 2 points. Found by all but the Vancouver which plays the strange Qa5 (no points) after which black does not seem to have an adequate answer to the simple 28. Bxb7.

28. Rg4
... e3 Once again only the Vancouver and Travel Master found this thematic pawn push (1 point). It could be that the Travel Master gives a large weighting to pushing passed pawn, while the Vancouver has some of the most sophisticated passed pawn and endgame algorithms giving it a distinct advantage in such positions. The Novag plays Bh5? (no points) which loses to 29. Bxf7! Bxf7 30. Rdg1. The Milano opted for Qf6 (no points) which lacks energy after 29. Rg3.

29. Rxc4



29.... Re8

Although this move is given 1 point and was considered by the Vancouver at the beginning of its search, 29...e2 (no points in the article) played by all the machines seems better as it leads to a definite win after 30. Rc1 Rd8 winning the bishop and carrying on the attack - so if your machine plays this and you want to give it a couple of points, that's up to you! It is only white's next move, which is a blunder, that allows black to win so quickly.

30. Qxb7 (?) After 30. Re1 it is much more difficult for black to penetrate the white defences.

30. ... e2 Chosen by the Novag and Travel Master (2 points) and slightly more forceful than Qxc4 (1 point) which is chosen by the Milano and Vancouver.

31. Re1

... Qxc4 4 points. Played by all the machines. Although this move carries 4 credit points it is relatively simple for the computers to find as the combination is not deep. The rest of the game is a follow-up to this combination and all the moves are found quickly by all of the computers. Qxb7 gains 1 point.

32. Bxc4

... Bxc3 + 1 point.

33. Qb2

... Bxe1 3 points

34. Bxe2

... Bg3 2 points and 1 point for Rxc2.

35. White resigns

The totals for the four machines were: Novag 26, Milano 32, Travel Master 35 and Vancouver 37 out of a possible 46. Adjusting for bonus points used in the original article (which cannot be used when testing computers), a good scale for interpreting the results would be: 44+ Grandmaster, 39-43 International Master, 30-38 Strong tournament player, 25-29 Strong Club, 15-24, Average Club. All the machines seemed to perform close to their expected playing strength, with perhaps the Travel Master doing a little better.

Give 25 Rxc2 30 Rxc2 34

If you've done quite a few of these tests on yourself, you'll know that your score can vary a good deal, depending on the degree to which the type of game used reflects your own particular strengths and weaknesses. The same thing applies to computers of course, so whilst a computer's score for a single game can be illuminating, only an average taken from several tests will give a reliable guide to all-round ability. If you do test your own computer or PC program, please let us know how it does. If we get enough results we'll publish a table of the outcome.

Our thanks to IM Malcolm Pein of Chess & Bridge Magazine, for kindly permitting us to use this material.

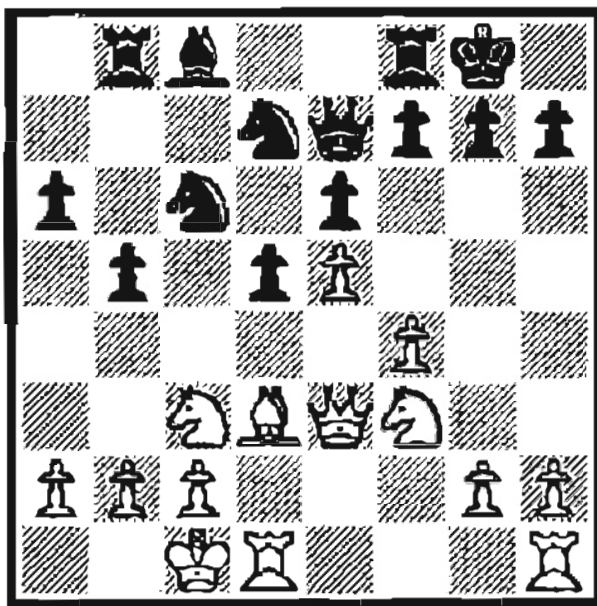
PC Corner

by Steve Maughan

Welcome to this new section of Selective Search, devoted entirely to PC programs running on desktop computers. The falling prices of fast PCs and the recent avalanche of new programs for the IBM compatibles has given this section of the market a new lease of life. In future issues I intend to cover all the current programs available, looking at their strengths and weaknesses. Also we will look at the best types of hardware to buy for a given budget as well as the best ways of setting up a machine for playing chess.

New Releases

Chess Genius: Programmer Richard Lang, who for many years has dominated the dedicated market with the top-of-the-range Mephisto computers, has now released a conversion of his Vancouver/Berlin program for 386 and 486 machines. There have been some minor modifications to the playing algorithm made as a result of the 'rooks on 110%' phenomenon, and some other small improvements. Also Richard found several bugs while he was converting the program, which have now been corrected. I think the following position brought to light a mysterious bug in the Lyon/Vancouver machines. White to play and win:



The dedicated machines all play moves such as g4 and Ng5, missing Bxh7+ followed by Ng5 and Qh3 winning.

However, Chess Genius finds the key move with only a few seconds thought. Of course it is not the algorithm changes which are so significant in the release of Chess Genius but the potential speed improvements. A 66 MHz 486 is approximately 9 times the speed of the Vancouver 68020!! This means Genius can search over one ply deeper than the Vancouver for a given playing speed...

With all of these improvements it is likely that Chess Genius running on a 66 MHz 486 is at least 150 ELO stronger than a Vancouver 68020, putting it close to International Master strength. However, when Intel release the upgrade to the 486 this spring (the Pentium chip), there should be machines capable of outpacing the Vancouver 68020 by a factor of 30 times!

Having said all that, Chess Genius did not do as well as expected in the recent world championships, coming 8th overall - a little disappointing when one considers how well the Lang programs have performed in past World Championships. However a result in a five-round Swiss is hardly conclusive, and CG more than made up for this by winning 5 out of 6 at the King's Head Quickplay Tournament to give it an impressive estimated grade of 237 BCF!

As regards the features, all of the Vancouver's have been transferred, giving the user control over the opening book, style of play, and piece values, to name but a few. The user interface is not quite of the same quality as the chess algorithm. Richard wrote the code for the interface entirely himself in assembler! I think for future versions he may decide to tackle the user interface in C or Pascal, or even try to find a third party to write it. Having said that, the user interface is quite functional and does include mouse support; it is certainly superior to that of Rex, M-Chess and HIARCS.

Fritz II:

The first version of Fritz was very successful, utilising the user interface from the ChessBase program. We can only assume Fritz II will be even more popular as it is a definite improvement on its predecessor. The playing algorithm has been substantially enhanced, mainly in the area of its tactical ability.

It is somewhat surprising that Franz Morsch has concentrated upon the tactical search to find improvements, since the first version was tactically very competent anyway. Fritz II is even more tactically aware, but still suffers from a lack of positional judgement, and it is in this area that Chess Genius has a real edge over Fritz II.

However, although Fritz II is not as strong as Chess Genius, it does have a pleasingly 'gutsy' and aggressive style. Also, the user interface is by far the best currently available and the features have definitely been designed for the serious chess player, with full database support and a very useful 'annotate game' option. It also offers a post-mortem analysis facility that will produce evaluations and suggested improvements on any stored game.

M-Chess Pro:

The professional version of M-Chess has been talked about since late September and there was great excitement when it finally arrived at the end of November. Rumours suggested Marty Hirsch had managed to make great improvements in utilising the 386-and-above hardware required by the Professional version. In reality the new package is a bit of a disappointment.

It would seem that the commercial pressure of getting the program out before Christmas may have allowed bugs to creep in. The graphics and features have been improved in functionality but, in my opinion at least, not in ease of use. This is not helped by the very sparse manual, which I understand will be updated as soon as time allows. The playing strength/style is, however, a saving grace, and there have definitely been improvements in certain positions, with the program solving some in half the time required by the old version of M-Chess.

However I have come across a couple of positions which the older version solved comfortably but the professional version does not solve at all. This suggests that it is not only the user interface which may contain bugs, but possibly the chess algorithm itself. Apparently there have been several versions of the program released since late November, so at least it seems the flaws are being addressed. I very much hope that Marty Hirsch has now solved the initial problems, as M-Chess has a unique and much-loved style of play.

HIARCS:

A completely new program from Mark Uniacke that comes in two versions; 'Standard' and 'Master'. Hiarc was quite successful in the recent World Championship and is now being marketed by Countrywide Computers. The program is written in C and has some unique features, such as the 'Fischer Clock' used in the recent Fischer-Spassky match, which makes allowances for the time taken to actually make a move. I do not think the Master version can match Chess Genius for playing strength and it is a long way behind with regard to the user interface. On the other hand it is not as expensive as Chess Genius either, at £69.99 compared to £89. I have not yet tested the Standard package, which sells for £35.99, but I gather that while it offers fewer features, the actual playing strength is only slightly down.

*PC Price Guide: Chess Genius £89. Fritz 2: £76.95 (£44.95 to upgrade).
M-Chess Pro: £99 (£50 to upgrade). Hiarc: Master Version £69.99,
Standard Version £35.99.*

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